

REMARKS

The Examiner is thanked for his careful attention to this application. In response to the Examiner's rejection of the claims, the applicant has made several amendments to clarify the scope of the invention. The specific amendments, together with the specific support for the amendments, follow.

Claim 1 has been amended by addition of the limitation of at least two web members extending across said chamber, and each of said web members having a plurality of catalytic converter elements held in said web members. Support for this is found at page 7 lines 8 to 12 as well as figures 4 and 9.

Claim 1 has been further amended by addition of the limitation of an injector for injecting gaseous reagents between said at least two web members to improve pollution control effects. Support for this is found at page 9, lines 22 to 25 as well as figure 9.

Claim 1 has been further amended by clarifying in the preamble that the combustion gases are "combustion exhaust gases". It is respectfully submitted that with this amendment, the later reference to "said exhaust gases" now has a clear antecedent basis.

Claim 2 has been amended to clarify the structural limitation that the exhaust gas flow through area is sufficient to prevent a significant pressure drop between the inlet and the outlet. Support for this is found at page 6, line 23 to page 7, line 5.

Claim 3 has been cancelled as the subject matter of this claim has been added to amended claim 1.

Claim 4 has been amended to clarify that each catalytic convertor element comprises a canister having a predetermined size and shape and a coated substrate contained within the cannister and that the catalytic convertor elements on each web member are the same. It is respectfully submitted that this wording now makes it clear that each web member has a plurality of catalytic converter elements, all of which are the same in terms of size and shape and coated substrate.

Claim 5 has been amended to clarify that the catalytic convertor elements on any given web member are the same in terms of size and shape of canister as well as the coated substrate contained within the canister, however, the catalytic convertor elements may be different on a second separate web member. The differences may be in terms of

size and or shape of cannister as well as differences in the coated substrate contained within the cannister. It is respectfully submitted that the wording of this claim is now clear as to the structural limitation the applicants are attempting to recite.

Claims 6 and 7 have been amended by adding the word "members" after the word "web" to add clarity to the claims.

Claim 11 has been cancelled as the limitation of an injector has been incorporated into claim 1.

Claim 12 has been amended to depend from claim 1 instead of claim 11.

Claim 15 has been amended by addition of the limitation of at least two webs forming barriers across the chamber, and each of the webs having a plurality of openings formed therein. Support for this is found at page 6 lines 22 to 25 as well as figures 5 and 6.

Claim 15 has been further amended by addition of the limitation of an injector for injecting gaseous reagents between said webs to improve pollution control effects. Support for this is found at page 9, lines 22 to 25 as well as figure 9.

Claim 15 has also been amended as in claim 1, by referring to the gases in the preamble as "combustion exhaust gases", thereby providing an antecedent for "said exhaust gases".

New claim 16 has been added to include the element of a manifold. Support for this element is found at page 9, lines 22 to 28 and figure 9.

New claim 17 has been added to include the element of at least one extraction point. Support for this element is found at page 9, lines 29 to 32 to page 10, lines 1 to 3.

Accordingly, the applicant submits that no new matter has been added, and that the amendments are proper and should be entered

Claim Rejections 35 USC § 102

The Examiner has rejected claims 1-2, 6-9 and 15 under 35 U.S.C. 102 (b) as being anticipated by Morita et al. Amended claims 1 and 15 now have the two additional limitations of at least two web members extending across the chamber, and an injector for injecting gaseous reagents between the web members. Morita does not teach more than one web member, nor does it teach an injector for injecting gaseous reagents between web

members. Accordingly, it is respectfully submitted that claims 1 and 15 as amended are not anticipated by Morita et al., and that the Examiner's objection to these claims has been addressed.

Claims 2 and 6 to 9 depend on claim 1 and add further limitations. Accordingly, it is respectfully submitted that the Examiner's rejection of claims 2 and 6 to 9 based on Morita is also overcome, in view of the allowability of claim 1 as amended.

Thus, in view of the foregoing, the rejections based on 35 USC 102(b) are believed to be overcome.

Claim Rejections 35 USC § 103

The Examiner has also rejected claims 3-5, 11 and 13 under 35 USC 103(a) as being unpatentable over Morita et al. in view of Lane et al.

The Examiner has stated that the apparatus of Morita is substantially the same as that of claims 3 to 5 but that it is silent as to whether more than one web member may be provided. The Examiner has found the feature of more than one web in Lane et al, and states that it would have been obvious to one having ordinary skill in the art to combine Morita and Lane et al. to arrive at an apparatus that is the subject of claims 3 to 5.

The applicant has carefully considered the Examiner's position and respectfully submits that 1) a person skilled in the art would not be motivated to combine Morita and Lane et al., and 2) in any event, the notional combination of Morita and Lane et al. does not disclose the applicant's invention as now claimed in the amended claims.

The Morita reference teaches a particulate emission treating apparatus which is disposed in the exhaust system of a diesel engine having ceramic filters disposed in a single web. The chamber of the apparatus can be separated into two halves to allow access to the single web member. On the other hand, Lane et al. teaches a catalytic convertor having three webs, each of which contains a plurality of filters. However, the

Lane et al. catalytic converter appears to have a single chamber and there is no disclosure that the chamber can be separated to allow access to the web members. Nor is there any teaching of this feature. Therefore, it is respectfully submitted that a person skilled in the art, having knowledge of these two references, would not be motivated to consider the combination of an emission treating apparatus having filters disposed on a plurality of web members, wherein the chamber containing the webs is separable to allow access to the web members and the filters.

Moreover, the notional combination of Morita and Lane et al. would not contain each and every feature of the applicant's invention as now claimed. Claim 1, as amended, includes the additional limitation of an injector for injecting gaseous reagents between the at least two web members to improve pollution control effects. It is respectfully submitted that Lane et al. does not disclose an injector for injecting gaseous reagents, nor does it disclose an injector located between at least two web members. As noted in col. 2, lines 56 to 60, Lane et al. discloses the injection of hydrocarbons in liquid state into the exhaust flow via a nozzle. This is supported by the fact that preferably the hydrocarbon is ethanol (a liquid) which is stored in a tank (see Fig. 1, in which the hydrocarbon 19 is indicated as a liquid). The ethanol is pumped via supply conduit 18 through pump 17 to nozzle 15. The location of the injector is shown in Fig. 1 to be in the exhaust passageway, upstream of the web members, not between web members, as claimed in amended claim 1. Injection of a gaseous reagent is very different from injection of a liquid and involves different design considerations. It is therefore respectfully submitted that replacing the liquid hydrocarbon injector of Lane et al. with an injector for gaseous reagents would not have been an obvious substitution to one skilled in the art.

In view of the foregoing, it is respectfully submitted that claim 1, as amended, is patentable

over the Morita and Lane et al. references, and that the Examiner's objection in this regard is overcome.

Furthermore, in view of the allowability of claim 1, it is respectfully submitted that claims 2 and 4 to 12 and new claims 16 and 17 are also allowable.

In view of all of the foregoing, it is respectfully submitted that the application is in condition for allowance since all of the rejected dependent claims are now dependent from allowable base claims. The applicant respectfully submits that none of the prior art, whether taken singly, or in combination, teach the features of the applicant's invention as now claimed in the independent claims. The applicant looks forward to the Examiner's response in this regard.

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Respectfully submitted,

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